CLAIMS

I/We claim:

1. A computer-readable medium containing a data structure, the data structure having rows and columns, the data structure comprising:

a tag column containing tag values that identify a type of the row for each of the rows of the table, each type identifies the columns of that row; and

a column of row that includes a plurality of sub-rows, each sub-row representing data of the column for that row.

2. The computer-readable medium of claim 1 wherein each sub-row has a tag column that identifies a type of the sub-row.

3. The computer-readable medium of claim 2 wherein sub-rows are nested to multiple levels.

4. The computer-readable medium of claim 1 wherein the data structure represents a nested conditional relation.

5. A method in a computer system for generating a sorted outer union of relational tables, the method comprising:

providing a plurality of relational tables;

for each of the tables, generating a query for the table that results in a column for each of column of each table and that results in a value for each column of each table on a path of joins to the table and null for each column of each table not on a path of joins to the table;

executing each of the generated queries to generate results;

combing the results of the queries into a single results table; and

sorting the results table.

6. The method of claim 5 including wherein in the query is an SQL query.

7. The method of claim 5 wherein the generating of a query includes:

for each table in the path,

adding the table to a from clause;

adding a join to a where clause; and

adding each column of the table to a select clause.

8. A method in a computer system for executing a query on data collection in diverse formats, the method comprising:

providing a mapping of each data collection format to an XML format;

receiving a query for a data collection based on the XML format;

generating a native query for the data collection from the received query using the provided mapping;

requesting execution of the native query to generate data in native format;

converting the data in the native format to a nested conditional relation (NCR) format; and

applying operators to the data in the NCR format to generate query results in NCR format; and

converting the NCR results into an XML format.